

5 METHOD AND APPARATUS FOR PRODUCING STYRENE BY
CATALYTIC DEHYDRATION OF 1-PHENYLETHANOL

ABSTRACT

10 The invention involves a method for producing
styrene, using at least two separate reactors, by
feeding a 1-phenylethanol-rich reaction mixture to a
first reactor, transferring the partially
catalytically dehydrated mixture to a second reactor
15 or to a distillation unit, and separating the mixture
into a fraction of low-molecular compounds and
transporting it to an outlet, and to a fraction
containing high-molecular compounds and transporting
it to the second reactor, or feeding a part of the
20 catalytically dehydrated mixture to the distillation
unit and the other part to the second reactor,
optionally recycling a part to the first reactor,
and/or optionally transporting a part to another
reactor, and/or to the distillation unit or to
25 another distillation unit; provided that part of the
reaction mixture of at least one of the reactors is
transported to the distillation unit. The invention
further pertains to an apparatus for performing this
method.